

Claims

140. (New) A two cycle internal combustion engine comprising a compressor for compressing combustible material and fuel, a fuel supply, a valve opened by compressed combustible material and fuel for passing said compressed combustible material and fuel into the engine cylinder through the valve orifice, engine means, sensor means, electrical means, computer means, lubrication means, engine management means, bearing means, cooling means, control means, and starting and stopping means.

141. The two cycle internal combustion engine as defined in claim 140 wherein the improvement comprises said compressor is a positive displacement gear type compressor.

142. The two cycle internal combustion engine as defined in claim 140 wherein the improvement comprises exhaust means to produce a four cycle exhaust stroke.

143. The two cycle internal combustion engine as defined in claim 140 wherein the improvement comprises said fuel supply includes fuel injector means.

144. The two cycle internal combustion engine as defined in claim 140 wherein the improvement comprises said compressor is a gear pump.

145. The two cycle internal combustion engine as defined in claim 140 wherein the improvement comprises ignition means.

146. The two cycle internal combustion engine as defined in claim 141 wherein the improvement comprises said compressor is a gear pump.

147. The two cycle internal combustion engine as defined in claim 146 wherein the improvement comprises exhaust means to produce a four cycle exhaust stroke.

148. The two cycle internal combustion engine as defined in claim 147 wherein the improvement comprises said fuel supply includes fuel injector means.

149. The two cycle internal combustion engine as defined in claim 148 wherein the improvement comprises ignition means.

150. (New) A two cycle internal combustion engine comprising a compressor for compressing combustible material and fuel, a fuel supply, a valve opened by compressed combustible material and fuel for passing said compressed combustible material and fuel into the engine cylinder through the valve orifice, engine means, sensor means, electrical

means, computer means, lubrication means, engine management means, bearing means, cooling means, control means, and starting and stopping means.

151. The internal combustion engine as defined in claim 150 wherein the improvement comprises said compressor is a positive displacement gear type compressor.

152. The internal combustion engine as defined in claim 150 wherein the improvement comprises exhaust means to produce a four cycle exhaust stroke.

153. The internal combustion engine as defined in claim 150 wherein the improvement comprises said fuel supply includes fuel injector means.

154. The internal combustion engine as defined in claim 150 wherein the improvement comprises said compressor is a gear pump.

155. The internal combustion engine as defined in claim 150 wherein the improvement comprises ignition means.

156. The internal combustion engine as defined in claim 151 wherein the improvement comprises said compressor is a gear pump.

157. The internal combustion engine as defined in claim 156 wherein the improvement comprises exhaust means to produce a four cycle exhaust stroke.

158. The internal combustion engine as defined in claim 157 wherein the improvement comprises said fuel supply includes fuel injector means.

159. The internal combustion engine as defined in claim 158 wherein the improvement comprises ignition means.

160. (New) A two cycle internal combustion engine wherein the improvement comprises a orifice for passing compressed combustible material and fuel into the engine cylinder.

161. (New) The two cycle internal combustion engine as defined in claim 160 further comprising spark ignition means wherein the improvement comprises a valve to cover said orifice for controlling the flow of compressed combustible material and fuel into the engine cylinder

162. (New) The two cycle internal combustion engine as defined in claim 161 further comprising a gear pump compressor means wherein the improvement comprises initiating combustion between said gear pump compressor and said valve to cause combustion operation of said valve.

163. (New) The two cycle internal combustion engine as defined in claim 162 further comprising computer means, lubrication means, engine management means, bearing means, cooling means, control means, starting and stopping means, sensor means, electrical means, and two cycle internal combustion engine means wherein the improvement comprises exhaust means to produce a four cycle exhaust stroke in the engine.